

# Using the Enterprise Architecture to Fulfill the CIO's Strategic Role

#### **Dick Burk**

Chief Architect and Director, Federal Enterprise Architecture Program, OMB

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# Strategic Role of the CIO

- CIO role as a business change leader
- Contributing vs. enabling
- Agencies must use full potential of CIOs
  - information and technology management leaders
  - active participants in the development of the agency's strategic plans and policies.
- CIOs must meet the challenge of developing capabilities to meet mission needs
- Role of IT organization is changing





# Responsibilities of the CIO

- The set of responsibilities assigned to both private and federal sector CIO was similar:
  - Systems acquisition, development, & integration
  - IT capital planning & investment management
  - Information security
  - Human capital for managing information resources
  - E-Commerce/E-Business
  - Strategic planning for information resources
  - Enterprise Architecture
  - Records Management





# **CEO and CIO Relationship**

- Perception of CEO often drives how the organization embraces the value of information technology
- Need both elements to ensure success
  - CEO -> appropriate view of information as a strategic tool
  - CIO -> embraces and reflects strategic role
- CIO needs to transform relationship from a transactional based to a trusted-ally and business leader

#### **CEOs**

- Develop strategic direction with contributions from CIO
- Understand the value of IT and how it can be utilized to achieve mission objectives

#### **CIOs**

- Embrace the strategic objectives of your business partners
- Focus on bridging the gap between business and IT
- Focus on process







# **Overall CIO Challenges**

- Short tenure less than 2 years
- Frustrated with role as simply an IT manager
- Senior executives not acknowledging or understanding CIO's strategic role
- Main challenges affecting both private and public sector CIOs:
  - Effective IT management
  - Sufficient and relevant resources
  - Aligning IT with business goals
  - Implementing new enterprise technologies
  - Controlling IT costs and increasing efficiencies
  - Ensuring data security and integrity
  - Communicating and collaborating
  - Managing change





# EA as a Strategic Management Tool

- EA is a management engineering discipline presenting a comprehensive view of the enterprise, including:
  - strategic planning, organizational development, relationship management, business process improvement, information and knowledge management, and operations
- EA is a design model to improve organization
- EA is a strategic management tool allowing
  CIOs to provide a strategic view of the enterprise
- EA can be used to demonstrate value to the organization





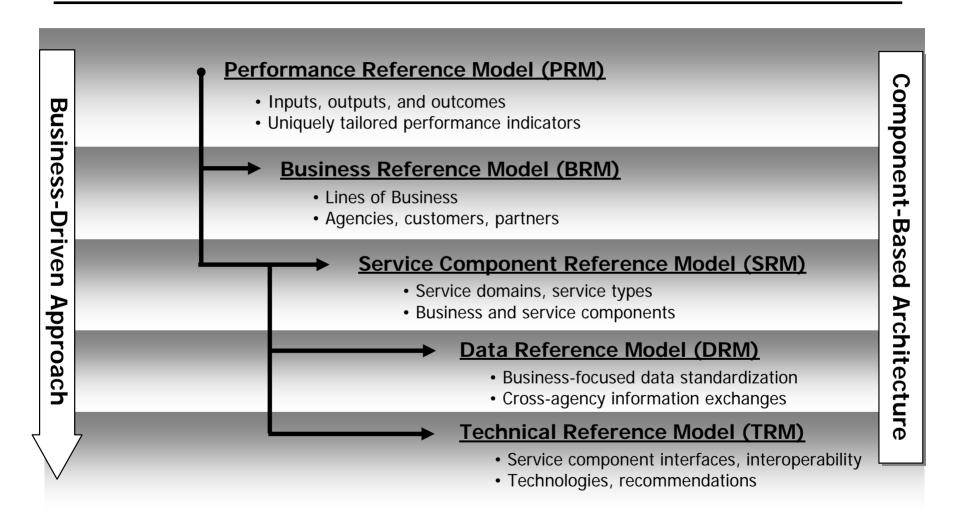
# **NASCIO EA Assessment Report**

- 95% of respondent have either adopted or plan to adopt EA
- NASCIO is promoting the role of Chief Architect as a strategic leadership role reporting directly to the CIO
- Most EA programs focus on technology architecture
- Only a few states (~20%) have broadened their EA to include business architecture, performance management and process architecture





#### **FEA Reference Models**

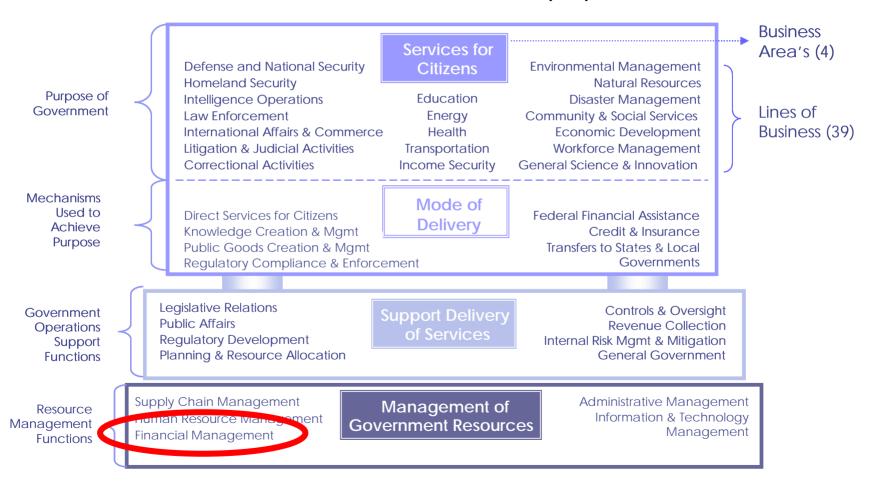






# **Business Reference Model (BRM)**

#### The Business Reference Model (BRM)







# **BRM: Financial Management Line of Business (LoB)**

Sub-Function	Definition
Accounting	Accounting entails accounting for assets, liabilities, fund balances, revenues and expenses associated with the maintenance of federal funds and expenditure of federal appropriations (Salaries and Expenses, Operation and Maintenance, Procurement, Working Capital, Trust Funds, etc.), in accordance with applicable federal standards (FASAB, Treasury, OMB, GAO, etc.).
Budget and Finance	<b>Budget and Finance</b> includes the management of the federal budget process including the development of plans and programs, budgets, and performance outputs as well as financing federal programs and operations through appropriation and apportionment of direct and reimbursable spending authority, fund transfers, investments and other financing mechanisms.
Payments	<b>Payments</b> includes disbursements of federal funds, via a variety of mechanisms, to federal and private individuals, federal agencies, state, local and international governments, and the private sector, to effect payment for goods and services, or distribute entitlements, benefits, grants, subsidies, loans, or claims.
Collections and Receivables	<b>Collections and Receivables</b> includes deposits, fund transfers, and receipts for sales or service.
Asset and Liability Management	Asset and Liability Management provides accounting support for the management of assets and liabilities of the Federal government.
Reporting and Information	Reporting and Information includes providing financial information, reporting and analysis of financial transactions.

#### **ARCHITECT**

- Develop and maintain enterprise architecture
- Review, reconcile and approve segment architecture for the agency's core lines of business and common IT services

# Architectural Portfolio

#### **INVEST**

- Select IT initiatives to define the agency's IT investment portfolio
- Control IT investments
- Evaluate IT investments

# IMPLEMENT

- Develop and maintain segment architecture
- Develop IT program management plan
- Execute IT projects

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ransition Strategy

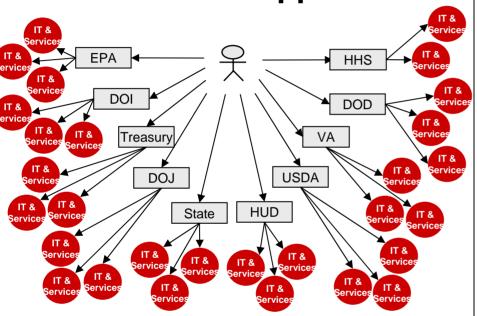
**END-TO-END GOVERNANCE** 



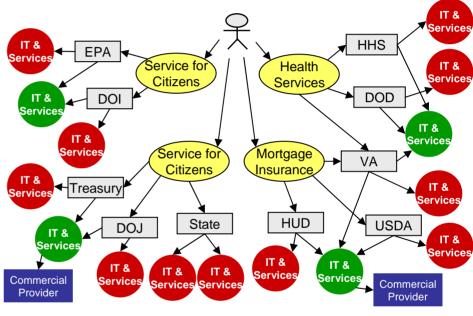


# Federal Example: Citizen-Centered Services

#### The Historical Approach ...



#### The Future Approach ...





= Service for Citizens



= Agency-specific Service





= Commercial Provider





### **Agency Example: HUD**

- Housing and Urban Development (HUD)
- Rental Housing Assistance
- Strategic value of EA discipline
- EA is uniquely positioned to see the "big picture" and understand the problem
- Solution was multi-faceted
  - Technical solution
  - People solution
  - Policy/Process solution





# For Further Information: www.egov.gov